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**IN THE UNITED STATES PATENT AND TRADEMRK OFFICE**

In re Application of :

Fumio ABE et al.

Group Art Unit : 1764

Serial Number : 08/857,585

Examiner : Nadine Preisch

Filed : May 16, 1997

For : HEATER AND CATALYTIC CONVERTER

**DECLARATION**

Honorable Commissioner of  
Patent & Trademarks  
Washington, D. C.

Sir :

Naomi NODA, a citizen of Japan, residing at 13, Aza-goura, Mabiki,  
Yamato-cho, Ichinomiya-city, Aichi-prefecture, 491 Japan declare :

That she is a scientist majored in the catalyst technology for  
exhaust gas purification;

That she is one of the inventors of the US Patent Nos.  
5,459,119, 5,376,610 and 5,439,865;

That she is familiar with the prosecution history of the above-  
identified application; and

That she has carried out the following experiments to  
demonstrate a zeolite having Si/Al ratio below 40 is unsatisfactory as

an adsorbent for the claimed structure.

### 1. OBJECTIVE

To demonstrate the criticality of the Si/Al ratio of 40 or more as an adsorbent.

### 2. METHDOLOGY

The procedure of the experiments is the same as that for data shown in Table 1 on Page 22 of the present specification, except for that a zeolite having Si/Al ratio of 25 was used. That is, the BET of said zeolite having Si/Al ratio of 25 was measured after having been subjected to the heat treatment in the same manner as that described on Page 22, Lines 1 to 5 thereof.

### 3. RESULT

The results of the experiments are shown in Table below.

Table

Si/Al Ratio	BET Specific Surface Area(m <sup>2</sup> /g) According to Heat Treatment Temperature (°C)			
	Prior to Heat Treatment.	900	1,000	1,100
25	340	115	40	< 1

### 4. DSISCUSSION

The data shown in Table above clearly shows the insufficiency in the thermal stability.

The undersigned declarant declares further that all the statements made herein of her own knowledge are true and that all the statements made on information and belief are to be true; and further that these statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the united States code and that such false statement may jeopardize the validity of the application or any patent issuing thereon.

Signed this 10 th day of November, 1999

Naomi Noda  
Naomi NODA